**DEPARTMENT OF TRANSPORTATION**
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 70.28

# WELDING INSPECTION REPORT

**Resident Engineer:** Pursell, Gary
**Address:** 333 Burma Road
**City:** Oakland, CA 94607

**Report No:** WIR-009697
**Date Inspected:** 12-Oct-2009

**Project Name:** SAS Superstructure
**Prime Contractor:** American Bridge/Fluor Enterprises, a JV
**Contractor:** Japan Steel Works

**OSM Arrival Time:** 700
**OSM Departure Time:** 1630
**Location:** Muroran, Japan

**CWI Name:** T. Imai

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| **Inspected CWI report:** | ☐ Yes | ☑ No | ☐ N/A | **CWI Present:** | ☑ Yes | ☐ No | |
| **Electrode to specification:** | ☑ Yes | ☐ No | ☐ N/A | **Rod Oven in Use:** | ☑ Yes | ☐ No | ☐ N/A |
| **Qualified Welders:** | ☑ Yes | ☐ No | ☐ N/A | **Weld Procedures Followed:** | ☑ Yes | ☐ No | ☐ N/A |
| **Approved Drawings:** | ☑ Yes | ☐ No | ☐ N/A | **Verified Joint Fit-up:** | ☐ Yes | ☑ No | ☐ N/A |
| | | | | **Approved WPS:** | ☑ Yes | ☐ No | ☐ N/A |
| | | | | **Delayed / Cancelled:** | ☐ Yes | ☑ No | ☐ N/A |

**Bridge No:** 34-0006
**Component:** Tower, Jacking, and Deviation Saddles

**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Art Peterson was present during the times noted above for observations relative to the work being performed in Fabrication Shop #4 and the Foundry Shop at Japan Steel Works.

Fabrication Shop #4:

QA NDT Verification of Saddle: Tower Saddle Segment T1-1 (built-up section to cast section)

The QA Inspector performed ultrasonic test (UT) verification inspection on complete-joint penetration (CJP) butt-joint groove weld no. 7Y-9U-1 after the final post weld heat treatment (PWHT) and the final machining operations were completed on the rib plate (built-up section) to rib (cast section) in accordance with AWS D1. 5-2002 section 6.13 and to the UT acceptance-rejection criteria for compressive stress in Table 6.4. The QA Inspector verified that the UT inspection results were in compliance with Table 6.4. See Ultrasonic Test Inspection Report TL-6027 dated October 12th, 2009 for details of equipment used and location of inspection on weld joint no. 7Y-9U-1 of tower saddle segment T1-1.

Preparation in-process for Trial Assembly: West Deviation Saddle Segments on East Side

The QA Inspector observed that the JSW personnel positioned west deviation saddle segments W2-E1, W2-E2, and W2-E3 onto jacks in preparation to perform the trial assembly survey of the west deviation saddle segments. The trial assembly survey will be performed using a 3D Laser system after the segments are bolted together to check for height and length dimensions, flatness between the faying surfaces , divider plate groove alignment between the segments, and the parallel wire strand (PWS) compartment widths as per the approved final machined drawings. The QA Inspector observed that the preparation for the trial assembly of west deviation saddle segments

W2-E1, W2-E2, and W2-E3 were in-process at the end of the QA Inspectors' shift.

Foundry Shop:

Grinding Operation in-process on Saddle: West Jacking Saddle

The QA Inspector observed (1) JSW personnel was in process performing the grinding operation on the major excavation and minor excavation repair welds previously performed on the west jacking saddle. The purpose of the JSW personnel performing the grinding operation is to grind the repair welds to an acceptable profile in accordance with ASTM A802 surface quality category (J) - (metal removal marks- welds) to a visual quality level (3). The QA Inspector observed that the grinding operation was still in-process at the end of the QA Inspectors' shift.

Unless otherwise noted in this report, all observations reported on this date appeared to be in general compliance with the applicable contract specifications.

**Summary of Conversations:**

No significant conversations were reported on this date.

**Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy at (510) 385-5910, who represents the Office of Structural Materials for your project.

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| **Inspected By:** | Peterson,Art | Quality Assurance Inspector |
| **Reviewed By:** | Guest,Kittric | QA Reviewer |